

REMARKS

In the Office Action mailed on March 26, 2003, restriction among the inventions of Groups I – IV, respectively, was required. Applicants' undersigned attorney provisionally elected to prosecute the invention of Group I with traverse. Applicants' undersigned Attorney hereby affirms this election.

The spelling of "biolabal" on line 2 of claim 9 has been corrected by this Amendment.

Claims 1 – 3 and 5 – 12 were rejected under 35 U.S.C. §102(b) as being anticipated by Mills et al., U.S. Patent No. 5,447,771. Claim 4 was rejected under 35 U.S.C. §102(a) as being unpatentable over Mills 5,447,771. By this Amendment, claim 4 has been canceled and the limitation of claim 4 has been added to claim 1, and to claim 9. In addition, claim 8, and claim 12 which depends thereon, have been canceled. Claims 1 and 9 now recite that the yarn has a denier of between about 15 and 200. The yarns described in Mills are carpet yarns. Such yarns would not have the denier in the range previously recited in claim 4, now recited in claims 1 and 9. The yarns of the present invention have a much smaller denier than the carpet yarns of Mills. While Mills at column 5, lines 15 – 17 describes that its filaments may be used for several different applications, including carpet, textile or non-woven uses, there is absolutely indication that the textile uses referred to by Mills would be a low denier yarn used in an apparel fabric. Thus, there is no implicit or explicit teaching in Mills of a low denier yarn in the range of 15 to 200 denier.

In the rejection of claim 4, the Examiner recognizes that Mills fails to teach a yarn having a denier range of 15 to 200. However, she states that it would have been obvious to one having ordinary skill in the art at the time the invention was made to decrease the yarn denier to increase the fineness of the fabric and soft hand (Column 5, lines 30 – 35 and 43 – 45). Applicants respectfully disagree. The cited passage on lines 30 – 35 states:

Carpets prepared from such yarns have good bulk and a soft hand.

The carpets have a silk-like luster with low glitter and demonstrate good washfastness. The carpets are especially suitable for use as bath rugs.

The yarns referred to in the cited passage are the yarns described in the previous two sentences, on lines 27 – 31, namely, the carpet yarn will have a denier of at least 500 and preferably the denier will be 1000 to 1200. The denier per filament (dpf) is in the range of 6 to 12. The cited passage on lines 43 – 45 states:

The S-like and Z-like filament cross-sections will tend to have greater color depth (a darker shade), while the trilobal filament cross-sections will tend to have less color depth.

It is respectfully submitted that there is absolutely no discussion in the cited passage of decreasing yarn denier. In addition, there is no disclosure of increasing the fineness of fabric. And while the cited passage states that carpets prepared from such yarns have a soft hand, there is no discussion of that such soft hand is a result of decreasing yarn denier.

The Examiner further states on the bottom of page 5 through the top of page 6 of the Office Action that “a decrease in filament denier (i.e., about 3 denier) would also inherently give rise to a decrease in yarn size when employing the same number of filaments”. This reasoning is unclear to Applicants. The only mention of 3 in Mills is the disclosure of denier per filament (dpf) typically being about 3 to 30. However, the yarn which has a dpf in the range of 3 to 30 is also the yarn which has a denier of at least 500 and preferably 1000 to 1200. There is no suggestion in Mills of decreasing filament denier in order achieve a dpf in the range of 3 to 30. Such yarn is already disclosed and has a denier of at least 500 and preferably 1000 to 1200.

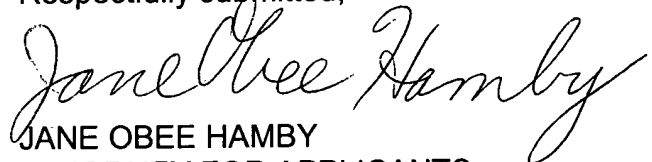
In addition, the Examiner states on the top of page 6 of the Office Action that it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art, citing *In re Boesch*, 17 F.2d 272, 205 USPQ 215 (CCPA 1980). In order to make the case that Applicants were trying to claim an optimum value of a result effective variable, the Examiner would have to show that the prior art recognized that a particular parameter, namely, yarn denier, affected a result, and that all that Applicants have done is optimize this variable. It is respectfully submitted that the Examiner has failed to point to anything in the prior art which links *decreased yarn denier* with Applicants’ result, namely, a yarn useful in apparel fabrics having a high moisture-wicking capability, combined with a soft hand and a silk-like lustrous appearance (see page 1, lines 18 – 22 of the present application). As noted above, the yarn denier that achieves a softness of hand in Mills is the disclosed denier of at least 500 and preferably 1000 to 1200. There is absolutely no discussion in Mills of decreasing yarn denier to achieve a yarn for an apparel fabric having soft hand, let alone a high moisture-wicking capability and a silk-like lustrous appearance. It is respectfully submitted that the Examiner’s attempt to characterize Applicants’ claimed yarn denier as a result effective variable is simply incorrect.

For all of the above reasons, claim 1, and claims 2, 3, 5, 6, 7, 10, 22 and 23 which depend thereon, are allowable over Mills. In addition, claim 9, and claim 11, 22 and 23 which depend thereon, are allowable over Mills.

In addition, by this Amendment, new claims 22 and 23 have been added. Antecedent basis for these claims can be found on page 6, lines 34 - 37, which states that the filaments of the present invention can be treated on their surface with permanent or semi-permanent hydrophilic treatments or finishes, through page 9, line 3, which describes these treatments or finishes. These claims highlight the wicking ability of the yarns of the present invention. Applicants recognize that the use of "S" and "Z" shape cross section filaments have been developed for use in carpets. However, the present inventors have found that "S" and "Z" shape cross section filaments can be used to form apparel with excellent wicking characteristics, especially at a dpf of less than about 4 (see the specification of the present application, page 16, lines 4 - 17, generally). It is respectfully submitted that the treated yarns as recited in new claims 22 and 23 would not have been obvious over Mills, since the yarns of Mills do not have wicking characteristics. Allowance of these claims is requested for this additional reason.

A Petition for an Extension of Time for two months is filed concurrently herewith. Should any further extension of time be necessary, the Examiner is authorized to take such further extension and charge the fee for such further extension to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,



JANE OBEE HAMBY
ATTORNEY FOR APPLICANTS
REGISTRATION NO. 32,872
TELEPHONE: 302-892-7907
FACSIMILE: 302-892-7925

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